



ARC-OVER

January, 2017 Edition

NEW MEETING PLACE

In that the Rube Boesch Center is in a tenuous location and the absence of follow through of TID on retention of the War Memorial for meetings, we are meeting at the Pizza Factory 1050 West Monte Vista, Turlock. It is suggested arriving at 6:00 pm for a bite to eat with meeting starting at 7:00 pm.

Christmas Dinner

The TARC Christmas Dinner was held at Berg Hall, Covenant Village in Turlock. There were 37 in attendance with a great time had by all. Unfortunately there no pictures submitted for publication. We ALL need to do better on that one....

Valentines Day

Valentines day occurs on our regular meeting night February 14th. In lieu of a special Dinner, your board has elected to make this a special event at the Pizza Factory. Bring a date or your wife, making sure if you bring both that it is OK with all parties concerned. The deal is if you show up by YOURSELF it costs \$5.00 per head. Bring a date, wife or both, the club picks up the tab. We are also including the wives of our dear SK comrades. This should be a pleasant evening of entertainment for all and give our spouses and other special folks and enjoyable evening out.

Field Day

Location for Field Day has been secured from der Schmidt's. With the ever increasing rain and run off, we might have to move up to higher ground. Here are some Pix sent in by Bambi.



1-11-2017 Club Meeting

The educational opportunity was presented by Club President Spencer Boyd on APRS (Automatic Packet Reporting System)... APRS provides vehicle & or personnel tracking location utilizing various mapping programs available on stand alone computer installations in addition to being forwarded to the internet for viewing via gateway stations in the area...

A brief overview of the history of Packet Radio in the area was given by Grady K6IXA. Packet operation began in the mid 70's with the advent of a kit put out by TAPR (Tucson Amateur Packet Radio) association. The kit contained a pink disclaimer sheet that stated if one was to put all of the parts in the correct location on the p.c.b. the thing should work, no warranty implied or given. Fortunately it did work.

Early packet operation gained popularity and numerous land line BBS bulletin board stations migrated to the airways via packet radio. Fred K6RAU maintained one for several years. They were all networked via radio and therefore formed a means of awkwardly but relatively effective of transmitting messages across the nation. Keep in mind this was prior to our friend, Mr. Al Gore inventing the Internet (grin)...

Grady placed a digi on 8500' Buck Rock in Kings Canyon National Park to facilitate access for those in the Southern part of the Valley to the K6RAU BBS. In addition he had a freq agile Digi on Fremont Peak 1 mile north of the Bullion Repeater site on 145.01,03,05,07, 09. It was utilized numerous times by hams who worked handling logistic traffic during major fires in the Sierra.

The Buck Rock digi from it's premier location allowed users connect preference to the K6RAU BBS to a point that local Merced, Atwater users had difficulty competing for access and air time. A new BBS was placed in Clovis and the Fresno folks were urged to utilize to no avail, seems they felt some unwarranted allegiance to Fred K6RAU. With the advancement of packet APRS, Grady decided to force the southern valley folks to utilize the Clovis BBS by moving Buck Rock to the 144.39 APRS frequency. The hewn cry eventually subsided and folks got over Buck Rock moving. Around that time K6IXA digi on Fremont had to vacate the closing AT&T site and subsequently became W6BXN-3 the APRS digi on Little Bullion. Remember all mapping and interconnectivity was prior to the Internet and there fore by RF only. When Buck Rock went to an APRS site the local maps starting showing nodes in Southern California and Nevada, speaking well of the 8500' elevation of the K6IXA-3 digi. For several years the K6IXA-2 APRS/WX digi on Sentinel Dome in Yosemite provide tracking and weather information. However it has been down for a couple of years due to site revisions by the park service and awaiting completion of a new Microwave tower at which time it will be in the new Park Service Building.

With the advent of the internet, numerous gateway stations popped up and now RF APRS activity can be tracked on the Internet. Spencer went into a detailed well thought out presentation of the current capability and utilization of the service. During his on-line presentation KL7EN-9 mobile showed up on Hwy 99 trans versing through the area. KL7EN is Van from Soldotna who frequents Central California on occasion and in fact attended one of our auctions some years back.

Spencer explained the utilization of APRS tracking by the "SARA" club during bicycle events they coordinate at various times. Tracking is especially advantageous for SAR (Search & Rescue) folks during a real emergency. They can silently and accurately be tracked. By using Google maps the disaster coordinator can literally activate a street level view to visualize what the SAR personnel are seeing. Ken KF6IDK had numerous pieces of APRS equipment for disaster implementation that he shared during the presentation.

With the advent of the Internet, the traditional BBS services such as K6RAU and various "DX" spotting networks went away. What remains for pactor utilization is APRS for tracking and the World Wide, Winlink RMS (Radio Messaging Service) for message handling, utilizing a direct radio to radio connection or via the Internet email system. If you were not present you missed a VERY well done presentation. Spence & Ken, thanks again for your informative sharing on this subject.

Editor K6IXA

A Blast from the Past

Identify this mystery ham ?



How about this couple ?



These two guys the one on the left is retired Head of University of California at Berkley Seismology Lab. The other is current active member of TARC.

This guy is still active TARC member. We ran out of filters for the club coffee pot. A clean sock from Grady's camper worked just fine much to the disdain of Les Johnson W6DIY's lovely wife...

[Answers on last page](#)

Why Things are the way they are ?

Ever wonder why 40 meters and below is LSB and above 40 meters is USB ? We can blame Central Electronics... In September 1962 they came out with the CE-10A a multiphase exciter with 9 MHz phasing circuitry. The 9 MHz SSB signal was then heterodyned by mixing with crystal or suitable external VFO to the desired frequency. 9 MHz minus 5 MHz gave us 80 meters LSB. 9 MHz plus 5 MHz produced 20 meters USB. A commonly used 5 MHz VFO was the military BC-458 Transmitter with a reduced power output obtained by reducing plate voltage to 75 VDC. In that the standard was established by Central electronics, subsequent manufacturers naturally followed suit with their designs. For a complete detailed history of the CE product line check :

<http://www.ce-multiphase.com/history.html>

Ever wonder why we use 600 kHz spacing on two meter repeater input and outputs ? Blame the early commercial tube radio's modified for amateur use. Early FCC regulations required that before you placed a repeater on the air the input had to be monitored to assure non interference to other any other users. Also operation on the output frequency was desirable when the repeater was off the air. The issue was that vacuum tube circuits are Hi-Q therefore quite narrow band unlike our solid state stuff of today. With operation on the input as well as the output frequency necessary it was determined by manufacturers specs that 600 kHz was the typical maximum offset allowed in a vacuum tube radio without exceeding a 3db (half power) degradation loss limitation.

She: "So, what did you do Today?"

He: "I changed a light bulb"

She: That's all?"

He: "Yes I filmed it, look [\(click\)](#)

The K6IXA Echo/IRLP Link to W6BXN system is now functional again. Android APP available.

The K6IXA RCForb Remote Base, 160 through UHF all Modes Operational with computer and Android APP available...

Winter Field Day

January 28-29, 2017



Winter Field day is Just ahead !

Field Day is not just for summertime anymore. Winter Field Day, sponsored by the Winter Field Day Association ([WFDA](#)), will take place over the January 28-29 weekend, and it can be a terrific time to prep for ARRL Field Day in June. The annual event's stated purpose is to encourage emergency operating preparedness in the winter, but it's also an excuse to get out of the house and enjoy the great outdoors. According to the WFDA, getting ready for emergency communication in a winter environment is just as important as the preparations and practice that take place each June during ARRL Field Day, and -- let's face it -- it's not cold and snowy everywhere during the winter months. Your local climate could be quite the opposite.

"Don't let those winter doldrums keep you locked up in the house," the WFDA says. "Get out and play some radio!" The WFDA said it believes that maintaining operating skills should not be limited to fair-weather scenarios.

The event, which got its start in 2007, is not restricted to North America. All Amateur Radio operators around the world are invited to participate, and there are three entry categories -- indoor, outdoor, and home. The [rules](#) are similar to those for ARRL Field Day. Operation will take place on all HF bands except 12, 17, 30, and 60 meters, as well as on VHF, UHF, and satellite. The event runs 24 hours. US and Canadian stations exchange call sign, operating category, and ARRL or RAC section.

The WFDA encourages both group and solo operation, and if you're not up for an outdoor winter adventure involving Amateur Radio, you can operate from the comfort of your shack. As the WFDA says on its [Facebook page](#), "The object is winter fun!"

<http://www.arri.org/news/winter-field-day-is-just-ahead>

<http://www.winterfieldday.com/>



New Delhi Day One

I made it here to New Delhi. Plane from SFO 2 hours late but they held the plane in Beijing, thank God. !! hours air time on first leg to Beijing then 6 more hours to New Delhi. Attached are a few pics. First is where I am staying. They have a restaurant that has won all kinds of gourmet awards and I can tell you the food is outstanding.

I went on a bicycle tour of the city from 7 AM to 11 AM. The rest of those pics are from the bicycle tour. Running out of time on wifi. Gotta go. More pics tomorrow.

Dick



New Delhi Day Two

Tomorrow morning at 5 AM I head for the Delhi railway station to catch a 06:03 train to Jaipur. Once there I will probably will not be able to send any emails. The meditation seminar I am going to does not allow computer stuff. They have told me they will send an email for me to my wife to say I arrived. I hope so.

Anyway here re todays pics. First three are Mahatma Ghandi's tomb I walked over to this morning. There is an eternal flame over the tomb. He was also cremated at this tomb, as is the custom in India. The last two are the neighborhood my hotel is in. As you can see the street corner can get really busy. Also a pic of a very good vegetarian restaurant I ate lunch at today. I sat across the street and watched three different resturants for about a half hour and selected the one all the locals seem to be going to. It was full of locals when I walked in. Very good veg food.!

So it will be about two weeks before you hear from me again. Dick



Day Three

Just a quick note to say I arrived at Dhamma Thali in Jaipur. Wild and crazy train ride, but I made it! I will be out of touch for 10 days now while I am in the meditation seminar. Everything going well.

Dick

TARC General Meeting Pizza Factory Monte Vista Avenue, Turlock January 10,2017

7:04pm President, Spencer Boyd, KJ6ART, called the meeting to order.
Pledge & Self Introductions

Grady Williams, went over the history of packet operation and eventual evolution from station to station, to BBS operation then eventually into APRS for tracking and Winlink RMS for message handling. Early modems including the TAPR-1 and GLB were discussed with their use on Local BBS operated by Fred K6RAU and local digi's on Fremont Peak used for emergencies most often during forest fires. With the Internet the BBS operations disappeared and Local Digi's at Fremont and Buck Rock migrated to APRS. The Fremont digi move to Bullion and became W6BXN-3 which required a crystal lattice filter on the adjacent D-Star system to protect its receiver.

Spencer Boyd then went into a PowerPoint Presentation on Packet, what it is and how it works. It is keyboard to keyboard and has changed over time. Packet radios talk to each other and pass data such as GPS and weather. They operate on 144.390 MHz Spencer went over the equipment, programs and websites. One that was shown was aprs.fi.

Lastly, Ken showed some of the equipment that he uses, discussed how he set it up and the different antennas he uses. The presentation was informative and interested. All enjoyed hearing from Grady, Spencer and Ken. Thank you.

The minutes from the last Board Meeting were passed around and reviewed. Spencer Boyd made a motion to approve the minutes as is if there were no changes. Approved by Ed Darrah, K7ERD, seconded by Reno Bianchi, KG6BAA.

Mike Smith, KJ6VFL, gave a Treasurer's Report. We have 92 Dues Paid Members this year compared to 84 last year.

Spencer Boyd thanked Ron for his service as President last year. All clapped.

Ed Darrah, K7ERD, gave his report and announced that Dues are not due and payable. Please see Ed to pay your 2017 dues.

Repeater Committee; For the project to get us into the South Bay Area, Grady Williams has found a different gentleman from CAL Fire to approve us moving forward for the Hollister/ Fremont Peak.

Old Business; Christmas Dinner. December 16th, at the Berg Hall, Covenant Village in Turlock, was a nice event. For those that have pictures, please send them on to Grady so that they can be on our next ARC Over. Grady Williams, has volunteered to put the ARC Over together, however we do need someone to take this on. All pictures and information will be due the Tuesday following General Club Meetings. The first deadline will be January 17th. Thank You

Spencer reminded members that the events for the year have been posted on the Web Site. No one got back to him with any changes or additions, so all is ok. For our February Meeting, February 14th the Board Members decided that we will hold our Valentine Dinner at the Pizza Factory, and pick up the tab for those bringing their sweetheart. Those coming single will simply need to bring \$5 and give the funds to Melinda DeCouto, KK6NWP.

We still need net controllers. Please let Brent Oken, KJ6MRG or Spencer know if you are interested. Our Board Meetings will be on Mondays prior to the General Meeting each month.

Upcoming event, Spencer inquired if members would be interested in a DMR Programming workshop. Please let him know if you are interested. The workshop can be at Crossroads in Turlock, on a Saturday. Fernando DeCouto, W6FRD inquired how many he would need to make it a go. Spencer replied that 5 or 6 would be fine. Seven members raised their hands that they would be interested. J

Raffles; we will start raffles again at our next meeting. All were pleased to hear this.

Final Announcement; Ken Stillwell, KF6IDK, announced about Winter Field Day. This will be January 28th and 29th. www.winterfieldday.com

Our President made a motion to adjourn at 8:05 pm. Bambi Schmidt, Ki6YQL so moved, Ron Roos, KJ6KNL, seconded the motion.

There were 24 in attendance.

Answers for a Blast from the past: Larry Rose, K6IY (K6ZDE) Turlock, Ca. at Coffee Pot...

Two Guys, Left is Bob Uhrhammer WB6VEX, Albany Ca. - Right is Steve Brown N6WQV, Hilmar Ca.